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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,127	04/05/2006	Roy Garvin	18880-002US1	2941

7590
Fish & Richardson
Suite 3300
60 South Sixth Street
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10/18/2010

EXAMINER

BASS, DIRK R

ART UNIT	PAPER NUMBER
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1777

MAIL DATE	DELIVERY MODE
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10/18/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,127	Applicant(s) GARVIN ET AL.	
	Examiner DIRK BASS	Art Unit 1777	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's request for continued examination filed October 5, 2010 is acknowledged. Claims 1, 7, 10, 16, and 20 are amended and claim 6 is cancelled. Claims 1-5, 7-10 and 12-20 are pending and further considered on the merits.

Response to Amendment

In light of the amendment, the examiner modifies the grounds of rejection set forth in the office action dated April 5, 2010.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 1-5, 7-10 and 12-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman, US 5225165 (Perlman) in view of Kassis et al., US 4534483 (Kassis), Utterberg, US 5385372 (Utterberg), and Henkel et al., US 5577626 (Henkel).
3. Regarding claims 1, 16, and 20, Perlman discloses a microtube (fig. 1-5) comprising;
 - a. A container having an open end defining an opening for receiving materials to be contained (REF 15), and a closed end (bottom of REF 11), the open end having a perimeter wall (implicitly disclosed); and
 - b. A lid connected to the container by a connecting means, wherein the lid is adapted to make closing contact with the open end (REF 14), wherein the lid is provided with a flange extending outwardly and upwardly therefrom (REF 24), wherein the flange is positioned lateral to the perimeter wall when the lid makes closing contact with the open end (implicitly disclosed) and is arranged to move towards the closed end of the container upon application of a mechanical force to a surface of the flange so as to remove the closing contact, whereby the container is opened (col. 2, l. 30-39).

Perlman does not explicitly disclose that the flange portion of the lid extends upwardly at an angle of about 90 degrees, is positioned adjacent to the connecting means, and is arranged to move towards the closed end of the container upon

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application of a downward force. However, utilizing flanges arranged as recited in claims 1, 16, and 20 to allow for easier opening of containers is well known in the art as shown by Kassis, Utterberg, and Henkel. Specifically, Kassis discloses a flask closure (REF 24) having a flange extending at an angle of about 90 degrees (REF 22), Utterberg discloses a tube having a lid portion (REF 32) having a flange (REF 54), and Henkel discloses a lid opening arrangement wherein the lid has a flange portion (REF 63). Kassis, Utterberg, and Henkel all disclose that the flange portion extends upwardly at an angle of about 90 degrees, is positioned proximate to the hinge portion of the respective lids, and is arranged to move towards the closed end of the respective container upon application of a downward force to said flange.

Therefore, at the time of invention, it would have been obvious to one having ordinary skill in the art to modify the flange of Perlman to include the features disclosed in Kassis, Utterberg, or Henkel in order to allow for an easier, single handed opening operation of the lid of Perlman.

Regarding claims 2-3, Perlman discloses a microtube which is a microcentrifuge tube (col. 2, l. 20-25) suitable for holding relatively small volumes of material, wherein the relatively small volume of material is a volume up to 4 ml. It is implicit in Perlman that the claimed microcentrifuge tube is capable of holding volumes between .4 and 2 ml. as related to the general definition of a microcentrifuge tube given in the background of the invention (col. 1, l. 9-14).

Regarding claim 4, Perlman discloses a microtube which is a microcentrifuge tube (col. 2, l. 20-25).

Regarding claim 5, Perlman discloses a microtube wherein the lid is adapted to make a sealing contact with the opening of the container (col. 6, l. 7-14).

Regarding claim 7, Perlman discloses a microtube wherein the connecting means provides for relative movement between the lid/flange and the container (fig. 5).

Regarding claim 8, Perlman discloses a microtube wherein the connecting means is a hinge (see "lid hinge 16", fig. 1-5).

Regarding claim 9, Perlman discloses a microtube wherein the connecting means comprises a hinge which may be fixed to the upper perimeter wall of the

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container defining the opening and to the lower surface of the lid, and about which the lid/flange and container can move (see “lid hinge 16”, fig. 5).

Regarding claim 10, Perlman discloses a microtube wherein the lid is adapted such that the flange extends outwardly from a position adjacent to or in axial alignment with the connection means (see “lid extension 24”, fig. 5).

Regarding claims 12-13, Perlman discloses a microtube which is constructed of a plastics material wherein the plastics material is laboratory grade injection molded plastic (see “virgin polypropylene or polyethylene”, col. 5, l. 67 – col. 6, l. 4).

Regarding claim 14, Perlman discloses a microtube wherein the lid and flange parts of the tube are made as an integral part of the container (fig. 5).

Regarding claim 15, Perlman discloses a microtube wherein the flange is adapted for use as a handle (see “lid extension”, col. 3, l. 49-52).

Regarding claim 17, Perlman discloses a storage system/vessel comprising one or more microtubes (col. 4, l. 67 – col. 5, l. 9 and col. 5, l. 65-66).

Regarding claim 18, Perlman discloses a storage system wherein the storage system/vessel is a rack, a reaction vessel, or a centrifuge (col. 4, l. 67 – col. 5, l. 9 and col. 5, l. 65-66).

Regarding claim 19, Perlman discloses a method of using a microtube for the storage of material, as reaction vessels, or in centrifugation (col. 4, l. 67 – col. 5, l. 9 and col. 5, l. 65-66).

Response to Arguments

Applicant's arguments with respect to claims 1, 16, and 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIRK BASS whose telephone number is (571) 270-7370. The examiner can normally be reached on Mon - Fri (9am-4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Krishnan S Menon/
Primary Examiner, Art Unit 1777

/DRB/
Dirk R. Bass